

## ELECTRON BEAM ANALYZER

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### Abstract

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**PROBLEM TO BE SOLVED:** To simultaneously provide an unevenness image of a sample surface in the same visual field for an EPMA analysis image or an SEM observation image in an electron beam analyzer. **SOLUTION:** A height measurement function using a laser beam is provided by using a part of components of an optical microscope equipped in the electron beam analyzer, and consequently, the unevenness image of the sample surface can be simultaneously measured in the same visual field as the EPMA analysis image and the SEM observation image. In the electron beam analyzer having the optical microscope, a laser radiating means 5a and a laser detecting means 5b are provided in an optical system 4a for the optical microscope 4, while a Z-axial feedback control system based on the laser reflection beam is formed between the laser detecting means and a sample stage, and consequently, an image obtained by electron beam irradiation and the unevenness image of the sample face based on a feedback control signal are obtained at the same time.

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